



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

With this as a basis, the author attempts to decide the practical value of sugar as an energy-producing food. He finds in using the ergograph that he fatigues much as Lombard does, viz., with periods of partial recovery. He can thus use the point of first fatigue as a measure of the condition of his muscles. As another measure he uses the total amount of work accomplished by the first thirty contractions. Diet was carefully regulated, and the experiments were repeated daily at the same hours. As in all former work in this line, practice was found to increase strength and regular diurnal variations occur. The total amount of work on a sugar diet is almost equal to that on a full diet, although fatigue occurs sooner. Days of fast compared with days on which 500 gms. of sugar were taken, showed an increase in amount of work for the sugar days of from sixty-one to seventy-six per cent. The effect of sugar added to a light meal increases work from six to thirty-nine per cent.; and even when added to a heavy meal, gives an increase of from two to seven per cent. Smoking has a much slighter effect on Harley than on Lombard, causing a diminution in work scarcely demonstrable.

Neue Darstellung vom histologischen Bau des Centralnervensystems.

RAMON Y CAJAL. *Archiv für Anatomie und Entwicklungsge-schichte*, pp. 319-423, 35 Figures in text. Leipzig, 1893.

In the above form we are presented with a translation from the Spanish, to which numerous revisions and additions, both in text and figures, have been made by Cajal himself. It furnishes a clear connected statement of this successful investigator's views and researches up to date, and in addition to this a running critical review of the work of others. Specifying, in a single instance, we note that Cajal denominates Dogiel's position as to anastomosis of cell processes as heretical, "ketzerisch." But the good reasons which he is able to advance remove from the sentence all taint of the Spanish inquisition. The spinal cord, cerebellum, cerebrum, different regions, retina and olfactory bulb are treated in order. No brief review of this important paper can be attempted.

Report in Pathology (upon gross and microscopical lesions found in thirty-eight cases, autopsies of insane patients). T. P. PROUT. *Annual Reports of the New Jersey State Hospitals*, 1893, pp. 99-117.

Dr. Prout is resident pathologist in the Morris Plains Asylum, and is to be commended upon the industry and patience with which he has dealt with his difficult problems. Gross lesions, either in the brain or its membranes and blood supply, are demonstrable in all cases. Among these, thinning of cortex and atrophy of convolutions with diminished or increased consistency of brain substance, anæmia, and œdematous and opaque condition of the pia, are especially frequent. Nearly all the cases were chronic, over half being terminal dementia (thirteen) and general paralysis (seven). Concerning his microscopical findings, Dr. Prout says: "The changes in the cells in all these cases were, it seems to me, ample to account for the mental disturbance manifested, provided we may consider the cortical cell the seat of mental activity, a point quite generally conceded." Degenerations of all sorts, fatty, pigmentary and granular, vacuolation of cell protoplasm and especially of nucleus, with fragmentation of the nucleus, are described in some detail and are figured. It is probably to be put to the account of Dr. Prout's equipment that no brain weights appear

in his excellent tabular statements of cases. With the apparatus supplied to state institutions, it is useless to insist that *weight of body, weight of brain* and *stature* should be given in case of every autopsy, but no really available data can be obtained for this country until this is done. For anyone who may wish to repeat and confirm Prout's observations, more exact statement as to the location examined will be necessary, and some indication of the methods employed. Definiteness upon these points would have added greatly to the practical value of the work.

Der Einfluss des Trigemini auf die Hornhaut. J. GAULE. Centralblatt f. Physiol., Bd. V., pp. 409-15. 1892.

Wie beherrscht der Trigemini die Ernährung der Hornhaut. Ibid., pp. 450-56.

Spinalganglien und Haut. Ibid., Bd. V., pp. 689-97.

Spinalganglien des Kaninchens. Ibid., Bd. VI., pp. 313-26.

Weitere Experimente an den Spinalganglien und hinteren Wurzeln. Ibid., Bd. VI., pp. 785-802. 1893.

Die trophischen Veränderungen und die Muskelzerrissenheiten. Ibid., Bd. VII., pp. 646-54. 1894.

Die trophischen Eigenschaften der Nerven. Berliner klin. Wochenschr., Vol. XXX., pp. 1065-68 and 1089-1102.

Zur Frage über die trophischen Functionen des Trigemini. C. ECHARD. Centralbl. f. Physiol., Bd. VI., pp. 328-32. 1892.

Ueber das Vorkommen von Muskelzerrissenheiten an gefesselten Kaninchen. H. E. HERING. Ibid., Bd. VII., No. 18.

Erwiderung auf Herrn Prof. Gaule's Bemerkungen über die bei gefesselten Kaninchen vorkommenden Muskelzerrissenheiten. H. E. HERING. Ibid., Bd. VIII., pp. 854-7.

The above group of papers may be cited as an interesting contribution to the subject of the trophic influence of the nervous system. For several years Gaule has been working to bring some physiological explanation to bear upon the array of facts, like that of herpes zoster, decubitus, atrophy of glands and muscles, after their nerves are severed, and many others, which seem to indicate clearly a trophic action of the nerves. He begins with the cornea, where effects may be most clearly observed, and performing Majendie's experiment on the fifth nerve and Gasserian ganglion, makes out definite changes in the cornea, drying and necrosis of the epithelium cells, wholly dependent on the operation and which cannot be thwarted by any possible protection of the surface. The fifth nerve was cut in different experiments at three points, through the Gasserian ganglion, between pons and ganglion and between cornea and ganglion. The result upon the cornea did not follow when the cut was made between pons and ganglion, and this at once proves that insensibility of the cornea cannot be the cause of its becoming dry, and in consequence, necrotic; but that necrosis of the cells is the cause of its drying, and hence that the cells of the Gasserian ganglion are true trophic centers for the cornea. Thus the usual explanation is exactly reversed. Similar observations were made upon the skin in frogs and rabbits, the hair interfering with entirely satisfactory study of the latter. In the frogs, destruction of the spinal ganglia was found to cause changes com-